

Helping gardeners choose the best plants

The Royal Horticultural Society trials a wide range of ornamental and edible garden plants to test their health, performance and weather endurance. The best performers may receive a prestigious RHS Award of Garden Merit (AGM). The Plant Trials provide the opportunity for multiple selections of the same plant to be grown side by side for the purpose of comparison. The selections are assessed by an expert RHS forum panel and the trial results are used to inform their decision to award plants the RHS AGM status.

The plants are usually grown from seed and vegetative material, submitted by nurseries, individuals and breeders. Visitors to RHS Garden Wisley are encouraged to ongoing plant trials on the Trials Field. Off-site trials are also held at gardens and nurseries across the UK.

First published in 2017 by the Royal Horticultural Society: RHS Media, Churchgate, New Road, Peterborough PE1 1TT Registered office: Royal Horticultural Society, 80 Vincent Square, London SW1P 2PE

Registered charity number 222879 / SC038262

rhs.org.uk

© Royal Horticultural Society

Front cover image: *Euphorbia* x *pasteurii* © RHS All images: © RHS, unless indicated otherwise





Euphorbia is one of the most successful flowering genera on the planet. In many varied physical forms, euphorbias can be found in diverse geographical regions and thriving in a broad range of habitats. Yet, of more than 2,000 species,

those perennials that tolerate the British climate number little more than 150 species and cultivars. It is this smaller group of plants, of interest to home gardeners in the UK, that is the subject of this RHS Grower Guide.

British gardeners appreciate euphorbias for their year-round colour, architectural qualities and bright and zingy bracts that add a burst of colour to the spring garden. There has been a sustained interest in the genus from gardeners who have, along with the nursery trade, seen a steady increase of new cultivars available.

The Euphorbia Plant Trial 2013–2015

Between 2013 and 2015 the RHS undertook a Plant Trial of hardy *Euphorbia*. It was the first RHS trial of the genus, and aimed to establish which selections were garden-worthy and therefore eligible for the RHS Award of Garden Merit (AGM). Up to this point only a handful of *Euphorbia* cultivars had an AGM.

It was thought that a trial would set a marker to help give gardeners confidence in the plants that they purchase. In addition, the following concerns had been raised:

- * several cultivars were known to be poorly maintained and lacking in quality;
- other common cultivars had visual appeal but were not reliably hardy or perennial;
- * a selection of cultivars were disease prone and therefore less likely to thrive;
- a number of plants did not flower well;
- * some selections were invasive, or self-seeded to a point that was detrimental to the garden-worthiness of the genus.

In total, almost 100 species and selections were trialled by a forum made up of 10 experts, and the best plants earned an AGM. During the trial, euphorbias with an existing AGM were reviewed, a number of AGMs were rescinded and others affirmed. All euphorbias with an AGM are included in this guide.

Bob Brown, Euphorbia Trials Assessment Forum Chair

Contents

The hardy Euphorbia Plant Trial 20	13–153
The Award of Garden Merit	4-5
AGM winning plants – A-Z	6-28
AGMs rescinded following the Plant Trial 2013–15	29
Other AGM Euphorbia	30-31
How to grow Euphorbia	32-33
Euphorbia at a glance	34-35
Where to use Euphorbia	36-37
Planting partners	38-40
Pests and diseases	41
Euphorbias trialled 2013–15	42-43
Suppliers to the Plant Trial	44

RHS hardiness ratings

To help gardeners determine which plants may be hardy in their locality, the RHS introduced a hardiness rating scheme for all plants, and this is listed below. (Temperature given are absolute minimum winter requirements.)

H1a Heated glasshouse – tropical (warmer than 15°C/59°F)

H1b Heated glasshouse – subtropical $(10-15^{\circ}C/50-59^{\circ}F)$

H1c Heated glasshouse – warm temperate $(5-10^{\circ}\text{C}/41-50^{\circ}\text{F})$

H2 Tender – cool or frost-free glasshouse $(1-5^{\circ}\text{C}/34-41^{\circ}\text{F})$.

H3 Half-hardy – unheated glasshouse / mild winter (-5 to 1°c/23 to 34°F).

H4 Hardy – average winter (-10 to -5° C/14 to 23°F).

H5 Hardy – cold winter (-15 to -10 $^{\circ}$ C/5 to 14 $^{\circ}$ F).

H6 Hardy – very cold winter (-20 to -15 $^{\circ}$ C/-4 to 5 $^{\circ}$ F).

H7 Very hardy (colder than -20° C / -4° F).

Further definition of these categories can be found at rhs.orq.uk/hardiness-rating

Colour references

RHS Grower Guide

In all plant descriptions that follow, the letter and number codes after the colour names refer to the *RHS Colour Chart*. The chart is available to buy at **rhsshop.co.uk**. Images of trial plants were taken *in situ* unless otherwise stated.

The hardy Euphorbia Plant Trial 2013–15



The RHS trialled *Euphorbia* on the Trials Field at RHS Garden Wisley in Surrey (above). In total, 95 entries were trialled, generally submitted as 2-litre plants by breeders, nurseries and individuals from the UK and Europe.

The objectives of the trial were:

- to judge for garden-worthiness (Award of Garden Merit);
- to demonstrate the range and use as garden plants;
- to compare established and new cultivars;
- to produce a permanent record through herbarium specimens, photographs and written descriptions for the RHS Herbarium at Wisley.

Judging the trial

The Euphorbia Trials Assessment Forum assessed entries on: 18 Jun, 17 Sept and 14 Nov 2013;

20 Mar, 15 May, 29 Jul, 17 Sept and 20 Nov 2014; and 26 Feb, 21 Apr and 30 Jun 2015.

The forum recommended plants for the Award of Garden Merit (AGM) using the following criteria:

- foliage quality;
- length of flowering;
- floriferousness;
- habit and structure;
- quality of flowering;
- hardiness;
- pest and disease resistance.

RHS Horticultural Database

RHS Plant Trials provide an important record for RHS research into cultivated plants and their names, and data is stored on the RHS Horticultural Database.

RHS Herbarium

Trials are an important source of material for the RHS Herbarium, Wisley, which comprises many separate collections. The primary focus of the collection is to acquire and maintain reference material of plants in cultivation.

The Trials Field at RHS Garden Wisley.



The Award of

What is the RHS Award of Garden Merit?

The RHS Award of Garden Merit (AGM) is intended to help gardeners select plants that have good all-round garden value, and is only awarded to plants that are:

- excellent for ordinary use in appropriate conditions;
- available;
- of good constitution;
- essentially stable in form and colour;
- reasonably resistant to pests and diseases.

Plants of all kinds may be considered for the AGM, including fruit and vegetables. Currently, more than 7,500 plants have an AGM, but new awards are made each year. Awards are made after assessment by an RHS forum of experts, including nursery owners, specialist growers and horticulturists, appointed by the Society. Each assessment is ratified by the relevant RHS Plant Committee.

Garden Merit

RHS awards can also be given by 'round-table assessment'. An award is given when a forum of horticultural experts meet to debate the characteristics and garden performance of plants that the Society is unable to trial in one of the RHS gardens.

To ensure consistent standards are maintained, the AGM is subject to regular review to make sure that every plant still merits its place on the list. Since 2013, reviews have been conducted by each RHS Plant Committee on a rolling basis.

Buying plants with the Award of Garden Merit It's easy to find and buy AGM plants:

- search using the RHS 'Find a Plant' feature on rhs.org.uk/findaplant or using our AGM Plant Search
- download a list at rhs.org.uk/agmlists
- check the latest edition of the RHS Plant Finder book, available to buy at rhsshop.co.uk
- look out for the AGM logo next time you are in a garden centre or nursery

Euphorbia 'Abbey Dore'

AGM 2015

Flowering time: summer to autumn.

Habit: upright to spreading, fairly open, 50cm (20in) H x 80cm (32in) W.

Foliage: yellow-green (146B), appearing slightly glaucous. Glabrous, matt.

Stems: yellow-green, flushed red at the base; glabrous.

Flowers: bright yellow-green (151B), buds slightly greener (N144B), glands brown-green (152D). The pedicels are green.

Hardiness rating: H7.

Herbarium specimen collected 21 May 2014.



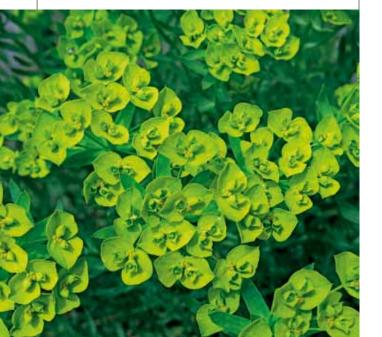
time; the yellowy green colour is very welcome in midsummer. The foliage is healthy and it regrows well

THE FORUM SAID:

from the centre. A semi-evergreen plant that hardly runs at all.









Euphorbia amygdaloides var. robbiae AGM 2015

Flowering time: late winter onwards.

Habit: compact and rounded, 50cm (20 in) H x 60cm (24in) W.

Foliage: darker green (N137A) above, lighter (138B) on lower side. Glaucous leaves with a shiny surface on upper side and a leathery touch.

Stems: red to greyed-orange (147B) at base becoming more yellow-green (145) towards the terminal inflorescence. Sparsely hairy.

Flowers: bracts yellow-green (N144D) but with darker green patches in places. Glands are yellow-green (N144D). One male flower, one female flower and two buds per bract. Pedicel sparsely hairy.

Hardiness rating: H6.

Note: this variety may be invasive but is easy to control.

Herbarium specimen collected 27 March 2014.

THE FORUM SAID:

A useful and valuable plant. Its flowers are very welcome in late winter.

Nice, easy plant for dry shade.

The deadheads turn a wonderful russetred / apricot tone when it sets seed.





Euphorbia ceratocarpa

AGM 2015

Flowering time: spring until the first frosts of autumn.

Habit: tall, upright, lanky shrub becoming woody, 1.6m (5¹/₄ft) H x 1.8m (6ft) W.

Foliage: glaucous green (137A), with midvein and smaller veins paler yellow-green (145B) above, greyed green (191A) below, paler mid-vein (145B). Glabrous.

Stem: young stems are green (145A); older stems flushing increasingly greyed orange (172A). Glabrous.

Flowers: bracts are yellow-green at the base overshot towards the tips with green (137A) above, paler green beneath (138B). Bracts that subtend the flowers are yellow-green (N144A) above and 151A below. Glands are yellow-green (N144A in young flowers and 153A in older flowers). The glands are petal-like, convex and sticky.

Hardiness rating: H4.

Herbarium specimen collected 21 May 2015.



THE FORUM SAID:
Phenomenal
flowering – it
usually flowers for
most of the year.
A really useful
plant and it looks
extraordinary
in winter.







Euphorbia characias subsp. characias 'Blue Hills'

AGM 2015

Flowering time: spring.

Habit: compact, upright, 90cm (35in) H x 1m (39in) W.

Foliage: green (137C) above and minutely hairy; paler green (139D) but greyer and shortly woolly beneath.

Stems: pale greyish green, slightly glaucous. Lower stem is lightly flushed greyed red (182C) especially at the leaf scars.

Flowers: involucral bracts are yellow-green, bluer than N144C, becoming light in patches towards the base. Fused perianth bracts are greyish yellow-green (slightly greener than 145A). Older, basal floret glands are greyed red (182B), while younger distal pair

are greyed purple (187A). Glands petaloid, developing a hairy ovary and appearing woolly.

Hardiness rating: H4.

Herbarium specimen collected 7 May 2015.



It has a lovely shape and character, and a good compact habit.

It has attractive narrow leaves.

The green bracts have a stunning, glossy black eye.



Euphorbia characias 'Tasmanian Tiger'

AGM 2015

Flowering time: late winter onwards.

Habit: chunky, low branching from central trunk, 55cm (22in) H x 80cm (32in) W.

Foliage: greyed green (189A–B), strongly variegated. Edges may be white (157D) to cream/pale yellow (2D) on fresher leaves; paler beneath. Very finely hairy.

Stems: grey-green, tinged greyed red at leaf scars, very finely hairy.

Flowers: involucre and perianth are very pale yellow (2D), glands slightly darker yellow (3D).

Hardiness rating: H4.

Herbarium specimen collected 12 March 2014.

Note: needs to be grown in a sheltered place to avoid leaves and flowers burning in the wind and sun.



It looks amazing – really good for a winter garden.

Very neat, compact and robust.
Good in pots.

The only variegated
E. characias type
with vigour.







Euphorbia characias subsp. wulfenii 'Jimmy Platt'

AGM 2015

Flowering time: spring.

Habit: upright, bushy, 1.1m (43in) H x 1m (39in) W.

Foliage: bluish from a distance; green (137B) above and paler greyish yellow-green (138B) beneath. Very finely, softly pubescent on most surfaces.

Stems: green above to lightly streaked grubby pink greyed-red (182C/D).

Flowers: involucral bracts are cup-like and yellow-green (N144A) overshot with darker green (144B). The younger glands are yellow-green (153A) becoming greyed orange (168D). Glands horned, inward curving.

Hardiness rating: H4.

Herbarium specimen collected 13 May 2015.

THE FORUM SAID:

It has a lovely pale midrib on the very narrow leaves – looks like a pinstripe.

Looks lovely with dew on the blue foliage. Has big, fat, yellow

flowerheads, which are wider at the top than at the base.

A strong and vigorous plant.





Euphorbia cornigera

AGM 2002, reconfirmed 2015

Flowering time: summer.

Habit: spreading perennial to 75cm (30in) H x W.

Foliage: narrowly oblong, dark green leaves with

paler midrib.

Stems: reddish.

Flowers: clusters of bright yellow flowerheads in summer, each forming a large, loose head.

Hardiness rating: H5.

THE FORUM SAID:

Fresh, vigorous, wonderful. Very impressive bold flowers. Makes an architectural statement.

> Has a very good presence.









Euphorbia epithymoides 'Major'

Flowering time: spring.

Habit: clump-forming, rounded and compact herbaceous perennial to 50cm (20in) HxW.

Foliage: dark green oval leaves (146B), slightly greyer beneath. Softly hairy.

Stems: stems grow in clumps. Pale green, softly hairy.

Flowers: clusters of bright vellow-green (151B) flowerheads 6-8cm (21/2-3in) across.

Hardiness rating: H6.

Note: previously listed as E. polychroma 'Major'. The decision for the RHS

to accept the name E. epithymoides

as the correct name for E. polychroma was taken by the RHS Nomenclature and Taxonomy Advisory Group at its meeting on 13 June 2013.





Euphorbia margalidiana

AGM 2015

Flowering time: May to November.

Habit: robust but tending to sprawl where unsupported, 1.2m (4ft) H x 1.8m (6ft) w. Very floriferous.

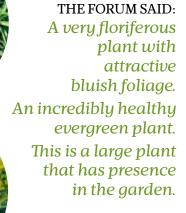
Foliage: mid green (N137C), greyer (191B) beneath. Leaves below inflorescence becoming yellow (6C) at their base. Glabrous, matt.

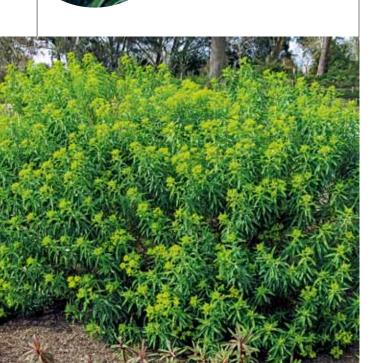
Stems: green, becoming yellower in inflorescence. Glabrous.

Flowers: involucre and perianth yellow-green (N144A), yellower green (151D) edges; glands dullish yellow-green (152D) becoming yellow (21B) later. Pedicels green, glabrous.

Hardiness rating: H4.

Herbarium specimen collected 12 May 2014.







Euphorbia x martini 'Ascot Rainbow'

AGM 2015

Flowering time: spring.

Habit: upright to slightly spreading mound, 85cm (33in) H x 90cm (35in) W.

Foliage: greyish green (147B), with darker green (N137A) patching on the occasional leaf; edges yellow, grubbier than 16C, this flushed red (53D) in places, especially the tips. Leaf under-surface is a greyed version of the above. Leaves are very finely hairy on both surfaces.

Stems: green in the upper inflorescence, becoming flushed red-purple (187C), this streaked but becoming solid at the base.

Flowers: bracts greyed green (147B) with broad margins of yellow (11A); glands dark red (187B),

shiny and 'cat head'-shaped.

Hardiness rating: H5.

Herbarium specimen collected 8 May 2015.

THE FORUM SAID:

A good winter plant and a short-lived perennial.

The foliage has a delightful warm, peachy glow and the flowers are a pale creamy green-yellow.

Neat habit, a very

good shape.





Euphorbia x martini 'Helen Robinson'

AGM 2015

Flowering time: spring.

Habit: upright and dense, floriferous, 80cm (32in) H x W.

Foliage: green (137B), maturing to N137A, paler (138B) beneath. Thickly, softly hairy when young, becoming glabrous and sublustrous above. Midrib and petiole green.

Stems: greyed red (181B–C), fading to green (144D); shortly softly pubescent.

Flowers: involucre and perianth yellow-green (N144A) with one or two random greener patches; glands greyed red (178A).

Hardiness rating: H5.

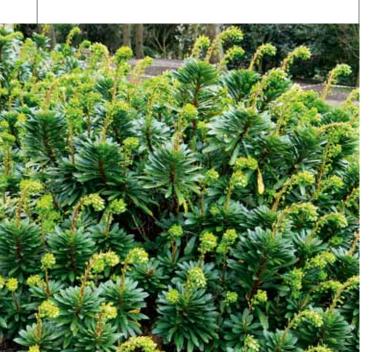
Herbarium specimen collected 24 March 2014.

Note: this selection can be invasive in some situations.

THE FORUM SAID: It has a beautiful leaf with neat rosettes. It is extremely effective as a winter plant.

Looks amazing
– healthy, neat,
fresh and bright.
Has a soft look and
makes a very good
foil for other plants.







Euphorbia myrsinites

AGM 1993, reconfirmed 2015

Flowering time: spring.

Habit: mat-forming, succulent, trailing perennial, 10cm (4in) H x 50cm (20in) W.

Foliage: evergreen. Leaves slightly fleshy, close set and spiralling from the base. Bright glaucous green (189B/191B).

Stems: leafy stems to 35cm (14in) long.

Flowers: large head of yellow-green flowers in terminal clusters 10cm (4in) wide.

Hardiness rating: H5.

THE FORUM SAID:

Lovely new growth.

Good shape.

It has beautiful blue foliage.





Euphorbia nereidum

AGM 2015

Flowering time: summer into autumn.

Habit: tall and upright, tending to flop where unsupported, 2m ($6^{1/2}$ ft) H x 1.8m (6ft) W.

Foliage: green (138A) with paler veins, slightly greyer beneath. Glabrous.

Stems: green, glabrous.

Flowers: involucre yellow-green (N144C), paler (N144A) especially about the edge. The perianth is yellow-green (151A), and the glands 153A. Gland segments are square with rounded corners in outline.

Hardiness rating: H5.

Herbarium specimen collected 9 June 2014.

THE FORUM SAID:

but it always

comes back.

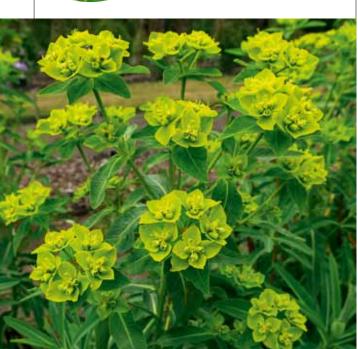
This euphorbia is more architectural than most and very imposing.

It is good for the back of a border.

Nice pinkish stems.

Usually gets hit by the cold in the winter







Euphorbia palustris

Flowering time: late spring and early summer.

Habit: bushy perennial to 90cm (35in) H x 1.2m (4ft) w.

Foliage: narrow, fresh green leaves often turning yellow and orange in autumn.

Stems: erect stems.

Flowers: bright greenish yellow, in large terminal clusters that look spectacular.

Hardiness rating: H7.

Herbarium specimen collected 16 April 2014.

THE FORUM SAID:

A cracking garden plant.

Compact, neat, upright habit.

Nice, healthy foliage.





Euphorbia x pasteurii

AGM 2015

Flowering time: late spring and early summer.

Habit: robust, erect, spreading, 95cm (37in) H x 1.6m (51/4ft) W.

Foliage: yellow-green (144C) bracts below inflorescence. Leaves green, yellower than 141A. Midvein yellow-green (145B), under-surface green (148C) but yellower. Edge of upper surface red-purple (60B). Glabrous.

Stems: yellow-green (145B) flushed yellow-orange (23D) on opposite surface. Young growth has red-purple (60B) blotching.

Flowers: the perianth bracts are small and insignificant. Older bracts are greyed orange (165B), turning much darker brown (N200A, but more orange (N25A)). Edged with hairy tufts.

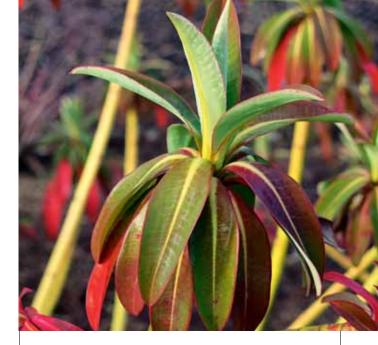
Hardiness rating: H4.

Herbarium specimen collected 28 May 2015.









Euphorbia x pasteurii 'John Phillips'

AGM 2015

Flowering time: late spring to midsummer.

Habit: erect, robust, spreading, 1.1m (43in) H x 1.6m (5¹/₄ft) W.

Foliage: yellow-green (144A) bracts below inflorescence. Leaves green (137A). The midvein is yellow-green (145B) above, and green (138B/C) below. The margins in older leaves are lined orange-red (N34A). Glabrous.

Stems: yellow-green (145A) in younger stems lightening to yellow-green (145B) in older stems. A flush of redpurple (60C) in places. Glabrous.

Flowers: the perianth bracts are small and insignificant, with older bracts yellow-green (154C to 144D).

Strigose in some, edged with woolly, hairy

tufts. Outer younger glands yellowgreen (152A) but with a central greyed orange (N163B) gland,

turning darker brown (N199B) as they age.

Hardiness rating: H4.

Herbarium specimen collected 28 May 2015.

THE FORUM SAID:

The red foliage and coral stems in winter (caused by the cold) can be very attractive.





Euphorbia x pasteurii 'Phrampton Phatty'

AGM 2015

Flowering time: early summer.

Habit: erect, robust shrub, outspread, 1m (39½in) H x 1.75m (5¾ft) W.

Foliage: yellow-green (144A) bracts and leaves below inflorescence. Darker yellow-green (146A) in lower leaves. Midvein yellow-green (145B/C). Veins and edge margins are paler in some leaves above, and green (139D almost) below. The margins in older leaves are lined orange-red (N34A). Glabrous.

Stems: yellow-green (151B) and greyed yellow (160A).

Flowers: perianth bracts are small and insignificant, yellow (3C) to yellow-green (144C), edged with hairy tufts. The outer, younger glands are grey-brown (199A)

but the central gland is greyed orange

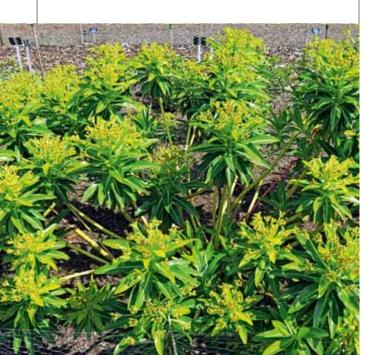
(N172B/D) turning darker brown (N200A) as it ages. Glands are petal-shaped, developing an ovary with scattered warty protrusions along the outer carpellary edge, yellow-green (N143B).

Hardiness rating: H4.

Herbarium specimen collected 28 May 2015.



THE FORUM SAID: Very attractive.





Euphorbia x pasteurii 'Roundway Titan'

AGM 2015

Flowering time: early summer.

Habit: robust, upright spreading rounded shrub, 1m (39½in) H x 1.65m (5½ft) W.

Foliage: yellow-green (144A) in the bracts and leaves below the inflorescence and darker (146A) in the lower leaves. Midvein yellow-green (145B/C). Veins and edge margins paler in some leaves above, green (near 139D) below. Margins in older leaves lined orange-red (near N34A), some older leaf blades tinged orange (24B)/orange-red (34A). Yellow-green (144A) in bracts and leaves below inflorescence. Glabrous.

Stems: yellow-orange (14C) / yellow-green (154B/C).

Flowers: perianth bracts are small and insignificant, yellow-green (154C), long hairs, strigose/tomentose. The outer younger glands greybrown (199A) with a central gland greyed orange (N172C) turning darker brown (N200A) as it ages. Glands are petal-shaped, each developing an ovary with scattered warty protrusions

yellow green (N144A). Hardiness rating: H6.

Herbarium specimen collected 28 May 2015.





Euphorbia rigida

AGM 2004 and reconfirmed in 2015

Flowering time: spring to early summer.

Habit: erect, then spreading perennial, 50cm (20in) H x W.

Foliage: the blue-green (147B) evergreen leaves are fleshy, and arranged spirally.

Stems: pale grey-green, slightly yellower than 193A, glabrous and dull.

Flowers: bright yellow flowers appear in small clusters at the tips of the shoots in late spring and early summer.

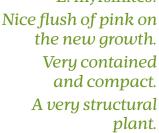
Hardiness rating: H6.

Herbarium specimen collected 25 March 2015.

THE FORUM SAID:

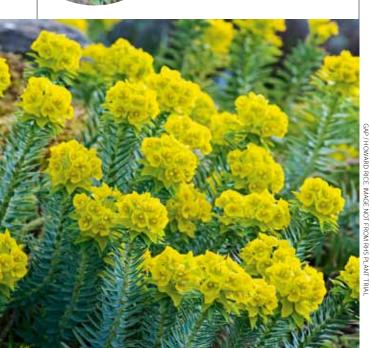
This selection is more upright and has a more pointy leaf than

E. myrsinites.











Euphorbia schillingii

Flowering time: summer.

Habit: robust herbaceous perennial with erect leafy stems to 90cm (35in) H x 30cm (1ft) W. Good structure.

Foliage: textural. Narrow, deep green leaves with conspicuous whitish midribs.

Stems: mid green, slightly greyer than N137B, noticeably paler midvein, much paler greyed green (191B) beneath.

Flowers: long-lasting bright yellow flowers in broad terminal clusters. Gentle honey scent.

Hardiness rating: H5.

Herbarium specimen collected 16 April 2014.



Euphorbia sikkimensis

AGM 2002

Flowering time: mid to late summer.

Habit: spreading perennial, 1.2m (4ft) H x 60cm (2ft) W.

Foliage: pink tinged rosettes of leaves maturing to golden green with a pink midrib.

Stems: upright reddish stems spread slowly.

Flowers: lime-green flowers.

Hardiness rating: H5.

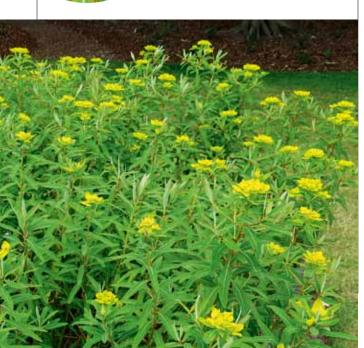
THE FORUM SAID:

This cultivar produces fabulous, vibrant, glassy red shoots in spring. In July or August it has lime-green flowers, which are very refreshing

at that time of year.









Euphorbia stygiana 'Torridge'

AGM 2015

Flowering time: late spring.

Habit: spreading shrub, reaching 2m (61/2ft) H.

Foliage: evergreen. Leaves deep green with a distinct yellowish midrib on the upper side, shiny, almost iridescent; chalky white on the underside with scattered hairs along the midrib.

Stems: woody, pale brown, young stems yellowish green.

Flowers: large, compound inflorescence, up to 25cm (10in) tall and 22cm (9in) across; individual clusters of flowers yellowish green, underside of the nectaries hirsute.

Hardiness rating: H4.

Note: the leaves of this cultivar are distinctive in being thicker and more leathery than the typical species.

THE FORUM SAID:

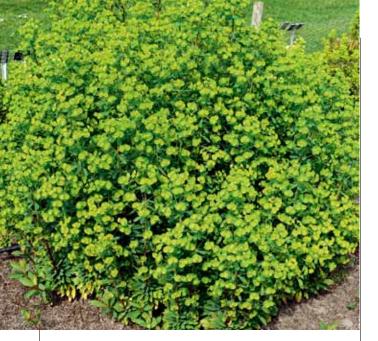
Love the pale underside and blunt tips to the leaves.

Very architectural plants.

Looks like a piece of sculpture.
Lovely, chunky rosettes.







Euphorbia 'Whistleberry Garnet'

AGM 2015

Flowering time: spring.

Habit: upright bush, very floriferous, 70cm (28in) H x 80cm (32in) W.

Foliage: yellow to mid-green, slightly yellower than 137B, midrib paler, sometimes red-flushed on the lower side. The lower side of the leaf/bracts in the inflorescence are also tinged greyed red (183D). Glabrous except on the basal edges; slightly dull.

Stems: strongly flushed greyed red (184B) with darker and lighter patches, especially in the inflorescence; sparingly covered with long, fine wispy hairs.

Flowers: involucre yellow-green (146D) with a bluer green tint towards the tips. The perianth is

yellow-green (144C), yellower on

the underside. The glands are reddish brown (178B), turning paler and browner later.

The glands are horned, shiny.

Hardiness rating: H7.

Note: this selection can be invasive but is easy to control.

Herbarium specimen collected 31 March 2014.

THE FORUM SAID:

It has very good new foliage in spring. It has red tinges to its foliage. Bees love it.

AGMs rescinded following the Plant Trial 2013-15

All plants that are awarded the RHS Award of Garden Merit (AGM) are periodically reassessed to ensure that current stock is consistent in all aspects with the standard required for the AGM. An AGM can be rescinded if, under assessment, a selection is deemed to have lost those characteristics for which it earned the award.



E. characias 'Portuguese Velvet'

AGM 1998

Reason: considered to be variable and no longer a distinctive clone.



E. characias Silver Swan ('Wilcott')

AGM 2012

Reason: fine as seasonal bedding but not as a perennial. Shapeless, wayward, not dome-shaped. Not robust.



E. characias subsp. wulfenii 'John Tomlinson'

AGM 1993

Reason: no potential as an AGM plant.



E. characias subsp. wulfenii 'Lambrook Gold'

AGM 1993

Reason: the clone originally awarded an AGM is now lost. Plants in cultivation (including in the trial – see photo, left) are seedlings; trial plants recorded no AGM potential.



E. griffithii 'Dixter'

AGM 1993

Reason: has good bronze summer foliage but ineffective in winter. Has been superseded.



Euphorbia Redwing ('Charam')

AGM 2002

Reason: this cultivar has been superseded. The original suffered from mildew. Does not persist in the garden.









Euphorbia fulgens

Euphorbia horrida

Euphorbia mellifera

Euphorbia milii

Other AGM

The following euphorbias also hold an AGM. like species and thus were not included as

Euphorbia flanaganii

AGM 2012

Succulent plant with snake-like branches that may grow to 30cm (1ft) long, radiating from a central stem or caudex. Deep green, deciduous leaves and yellow-green flowers clustered at the plant's crown. Good for a sunny window.

Hardiness rating: H2.

Euphorbia horrida

AGM 2002

A cactus-like shrub with erect, ridged stems bearing long spines and solitary green flowers. Grows to around 1.5m (5ft) high. Grow on a sunny windowsill, greenhouse or conservatory.

Hardiness rating: H2.

Euphorbia

Most of these are tender, succulent, cactuspart of the 2013–15 RHS Plant Trial.

Euphorbia meloformis

AGM 2002

Curious cactus-like species ideal for a sunny windowsill with slow-growing, ribbed, succulent stems, marked with purple banding. Small yellow flowers appear at the tips, held on short, stem-like peduncles, which remain on plants after flowers fade.

Hardiness rating: H2.

Euphorbia milii

AGM 1993

Usually evergreen shrub to 1m (39in), with thorny, succulent branches, leathery obovate leaves and axillary clusters of small yellow flowers with bright red bracts. Good on a sunny windowsill or in a conservatory.

Hardiness rating: H1b.

Euphorbia fulgens

AGM 2002

Deciduous shrub with slender spiny stems bearing dark green, lance-shaped leaves and clusters of scarlet flowerheads from the upper leaf axils in winter. Used as a cut flower; best kept in a greenhouse or conservatory.

Hardiness rating: H1b.

E. mellifera

AGM 2002

Shrubby species with domeshaped habit and whorls of bright green leaves with a white stripe along its midrib. The brownish flowers emit a honey-like scent.

♦ Hardy in sheltered gardens, this species was included in the Plant Trial. Due to its tender nature, will thrive best in a cool greenhouse.

Hardiness rating: H3.

Euphorbia obesa

AGM 2002

Ball-shaped, dwarf succulent that is slow to grow and resembles a stone. Plants reach around 20cm (8in) tall and 9cm (3in) across. The single stem is grooved, becoming cylindrical with age. Dioecious with circular, cup-shaped flowers appearing at the top of the stem. Sadly, it is now endangered in the wild.

Hardiness rating: H1c.

E. milii var. splendens

AGM 2002

A semi-prostrate to scrambling, slow-growing, mainly evergreen, semi-succulent shrub. Stems are armed with thorns and the small yellow flowers with their showy bright pink, red, white or yellow bracts appear mostly in spring and summer. A good house plant for a sunny place.

Hardiness rating: H1b.



How to grow

Euphorbia is the sixth largest plant genus in the world, containing more than 2,000 species of trees, shrubs, annuals, biennials, perennials, subshrubs and succulents. These adaptations mean species grow in many different habitats, from African plains to Asian forests, and in temperate, tropical and subtropical regions. The plants that make up this genus vary from being fully hardy to frost tender.

Euphorbia

In temperate parts of the world, gardeners have access to a large and striking collection of euphorbias for every situation from perennial borders to woodland slopes, formal courtyards and bog gardens.

For the UK gardener, euphorbias offer excellent plant value with selections suitable for woodland gardens or Mediterranean-style planting. For example, rosettes of creeping species such as *E. amygdaloides* var. *robbiae* offer shady ground cover and glorious zingy, lime-green flower spikes, while the glaucous biennial stems of species such as *E. characias* grace the Mediterranean garden.

On the whole, euphorbias are easy to grow, generally preferring well-drained soil and thriving in a wide range of garden situations. Most will adapt to full sun or partial shade, with the greener-toned selections better adapted to woodland conditions and preferring a level of shade. Silver- or blue-leaved euphorbias flourish in sharply drained sites and bask in full sun.

Most euphorbias prefer sites protected from strong wind.

Euphorbia at a glance

- Overview Reliable performers in the garden, many euphorbias are appreciated for their bright burst of spring colour as much as for their architectural elegance.
- ♦ Soil Most perennial euphorbias prefer light soils in full sun. Prepare the ground before planting but avoid using fertiliser, unless plants are being grown for cut flowers, since this will encourage growth that may need staking in summer.
- ♦ Size Highly variable from prostrate to large, shrubby plants.
- ◆ Garden position Euphorbia is a genus of diverse species and as such there are no specific guidelines on what to plant and where. Woody-stemmed species with glaucous leaves fit best with Mediterranean-style planting: their preference for drier and lighter soils make them suitable for gravel gardens and sun-drenched locations. Many of these have a more upright and architectural habit. Herbaceous kinds can be architectural in form or may have a spreading habit. Selections are available in a range of different sizes, meaning there will be plants suitable for the back, centre and front of a border. These types may prefer a more humus-rich soil. Generally, euphorbias prefer a situation that is sheltered from wind.
- ◆ Water requirements Silvery or blue-leaved euphorbias prefer a drier soil, while those with greener leaves prefer a more moist environment.

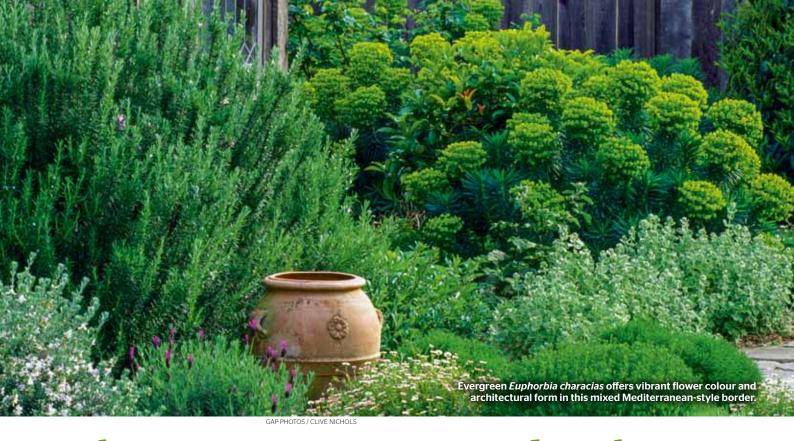
- ◆ Pruning Most euphorbias do not need pruning, but some older specimens may look better if tidied. Woody-stemmed species such as *E. characias* start to flower on two-year-old wood and benefit from having old stems removed after flowering, leaving new ones to grow and flower the following year.
- ◆ **Propagation** Euphorbias may be propagated from evergreen cuttings, taking new growth from the base of the plant in early summer. Since the milky sap is an irritant, always wear gloves for this task, then leave the cuttings, once devoid of any leaves, to dry before planting in compost-filled containers. Set aside in a cold frame then check the following spring that the root system is developing. Leave any with undeveloped root systems to grow on.

Clump-forming euphorbias may be divided at the root directly after flowering for those plants that flower early, and in spring for those that flower later in the season.

Ripe seeds may be collected from the three-sectioned capsules. Remain vigilant once the capsule starts to shrink and dry. Collect and sow seeds at the same time as they would be dispersed from the parent plant. Sow on fine compost in an unheated greenhouse.

♦ Pests and diseases The RHS Plant Trial highlighted pests and diseases that affected plants. See page 41 for details. Generally, euphorbias have limited appeal as a food source for small creatures.





Where to use

An at-a-glance guide to choosing the right *Euphorbia* for your garden situation.

Wet sites

(also in a border that does not dry out)

- ♦ E. griffithii
- ♦ E. sikkimensis
- ♦ E. palustris

Sheltered sites

- ♦ E. characias 'Tasmanian Tiger'
 - ♦ E. mellifera
 - E. nereidum
 - ♦ E. x pasteurii
 - ♦ E. stygiana

Shade-tolerant

(also for sunnier sites)

- ♦ E. amygdaloides
- ♦ E. epithymoides
 - ♦ E. x martini
- ♦ E. 'Whistleberry Garnet'

Dry and sunny sites

(should not need watering once established. Suits Mediterranean-style plantings)

- E. rigida
- ♦ E. myrsinites
- ◆ E. rifyrsiffices◆ E. characias
- ♦ E. cyparissias
- ♦ E. margalidiana
 - ♦ E. nicaeensis
 - ♦ E. pithyusa
- ♦ E. seguieriana

Steep banks

- ♦ E. amygdaloides
 - ♦ E. cyparissias
 - ♦ E. myrsinites
 - ♦ E. rigida

Euphorbia

Ground cover

(creeping, suckering, and spreading plants)

- ♦ E. amygdaloides
- ♦ E. cyparissias
- ♦ E.'Whistleberry Garnet'

Winter interest

- ♦ E. ceratocarpa
- ♦ E. characias
- 'Tasmanian Tiger'
 - ♦ E. myrsinites
- ♦ E. margalidiana
 - ♦ E. x martini
- 'Ascot Rainbow'
- 'Helen Robinson'
- ♦ E. x pasteurii
- 'John Phillips'

Herbaceous border

(with stems that need cutting back anually)

- ♦ E. 'Abbey Dore'
- ♦ E. cornigera
- ♦ E. donii 'Amjillasa'
- E. epithymoides
 - ♦ E. palustris
 - ♦ E. schillingii
- ♦ E. sikkimensis

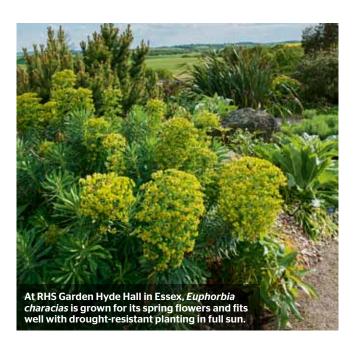
Attracts pollinators

- ♦ E. amygdaloides
 - ♦ E. characias
 - ♦ E. cyparissias
 - ♦ E. nicaeensis
- ♦ E. epithymoides
 - ♦ E. cornigera
- ♦ E. sarawschanica
- ♦ E.'Whistleberry Garnet'

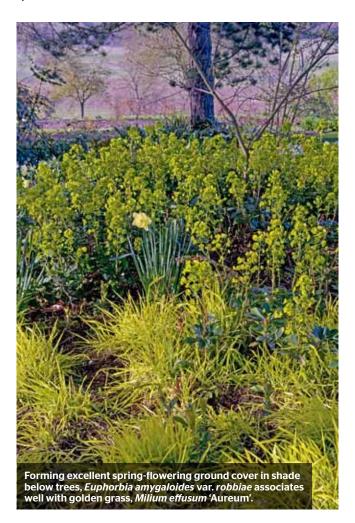


The varied growing requirements of euphorbias mean they can be used in gardens of different characters and conditions.

Species and selections of *Euphorbia* with blue and silver tones to their leaves, adapted to hotter, more arid conditions, suit cottage gardens. They associate well with a blend of shrub roses, hardy geraniums, lavender and salvia. Cultivars of *E. characias* provide punctuation in such settings and also suit more landscaped Mediterranean-style and gravel gardens. In this environment they blend with *Phlomis*, *Sedum* and other hardy succulents, *Eryngium* (sea hollies) and *Cistus* (rock rose). Lower-growing euphorbias such as *E. myrsinites* can loll on gravel among alliums and nerines.



Above: In early summer, the spires of lupins and pink chalices of peonies are united by the acid-yellow flowerheads of clumpforming herbaceous *Euphorbia cornigera*, another first-rate species that had its AGM reconfirmed in the RHS Plant Trial.



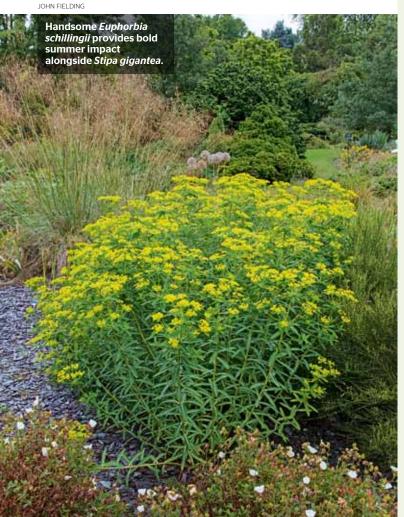
Architectural domes of Euphorbia mellifera and E. x pasteurii fit with a big-leaved, exotic look in the garden. A single specimen may be a perfect foil to cannas and palms. Shots of colour are often provided by Dahlia and Crocosmia in borders, but earlier you can use the fiery heads of E. griffithii, a herbaceous plant useful for mixing with many border plants in early summer.

These herbaceous euphorbias are the stars of early May borders. Species such as E. palustris and

> E. epithymoides add bursts of acidyellow and fresh lime tones. Their woodland sister is E. amygdaloides var. robbiae - as ground cover or underplanting it grows well alongside hellebores, Pulmonaria and ferns in spring.

Versatile orange Euphorbia griffithii with tulips (above) or annual Smyrnium perfoliatum (right).





Pests and diseases

Euphorbias are usually trouble-free as garden plants, but they can occasionally be affected by problems.

The following plant pathogens may affect some plants while in the glasshouse prior to planting out:

♦ Botrytis cinerea – grey mould, causing stem rots of glasshousegrown plants.

The following plant pathogens may affect some plants:

- ♦ Rust in the Plant Trial this affected E. griffithii and E. margalidiana.
- ♦ Phytophthora root and stem rot.
- **♦ Thielaviopsis** root rot.
- ♦ Pythium root and stem rot.
- ♦ Rhizoctonia solani root and stem rot.
- ♦ Fusarium root and stem rot.

Saturated soil creates ideal conditions for pathogens such as Thielaviopsis, Phytophthora and Pythium to spread. No treatment is available for these diseases and resting spores may remain in the ground for a number of years. Attention to hygiene will reduce the risk of these diseases.

The following pests may occasionally affect plants:

- Aphids
- ♦ Glasshouse red (two spotted) spider mite can affect plants outdoors during the summer.
- ♦ Tortrix moth

Manually remove infestations where practical, or treat with an approved organic or synthetic pesticide, if necessary.



Euphorbias trialled 2013–15

- Euphorbia 'Abbey Dore' AGM
- & E. amygdaloides 'Craigieburn'
- & E. amygdaloides 'Frosted Flame'
- & E. amygdaloides 'Purpurea'
- E. amygdaloides var. robbiae AGM
- * E. Blackbird ('Nothowlee')
- & E. 'Blue Haze'
- ❖ E. ceratocarpa AGM
- & E. characias 'Black Pearl'
- & E. characias 'Blue Wonder'
- & E. characias subsp. characias 'Blue Hills' AGM
- & E. characias subsp. characias 'Humpty Dumpty'
- * E. characias 'Dwarf Black Pearl'
- & E. characias 'Forescate'
- & E. characias 'Glacier Blue'
- & E. characias 'Kestrel'
- * E. characias 'Portuguese Velvet'
- * E. characias Silver Swan ('Wilcott')
- ❖ E. characias 'Tasmanian Tiger' AGM
- & E. characias subsp. wulfenii
- * E. characias subsp. wulfenii 'Emmer Green'
- 💠 E. characias subsp. wulfenii 'Jimmy Platt'
- E. characias subsp. wulfenii 'John Tomlinson'
- E. characias subsp. wulfenii 'Lambrook Gold'
- E. characias subsp. wulfenii 'Purple and Gold'
- E. characias subsp. wulfenii 'Shorty'
- & E. characias subsp. wulfenii 'Silver Shadow'
- & E. characias subsp. wulfenii 'Thelma's Giant'
- & E. 'Copton Ash'
- * E. cornigera
- * E. cornigera 'Goldener Turm'
- E. cyparissias 'Fens Ruby'
- & E. deflexa
- & E. 'Despina'
- & E. donii
- & E. donii 'Amjillasa' (AGM subject to naming)
- & E. 'Efanthia'
- & E. epithymoides (formerly E. polychroma)
- & E. epithymoides 'Bonfire' (formerly E. polychroma Bonfire')
- & E. epithymoides 'Candy' (formerly E. polychroma 'Candy')
- E. epithymoides 'Major' (formerly E. polychroma 'Major') AGM
- E. epithymoides 'Midas' (formerly E. polychroma 'Midas')



cyparissias

ens Ruby

- & E. epithymoides 'Senior' (formerly E. polychroma 'Senior')
- E. Excalibur ('Froeup')
- E. fragifera
- ♣ E. griffithii (AGM pending)
- . E. griffithii 'Dixter'
- & E. griffithii 'Fern Cottage'
- & E. griffithii 'Fireglow'
- & E. griffithii 'King's Caple'
- & E. griffithii 'Wickstead'
- & E. jacquemontii
- ♣ E. Improved Kalipso ('Imprkalip')
- 💠 E. margalidiana AGM
- & E. x martini
- & E. x martini 'Ascot Rainbow' AGM
- & E. x martini 'Baby Charm'
- & E. x martini 'Helen Robinson' AGM
- & E. x martini 'Kolibri'
- * E. x martini Rudolph ('Waleuphrud')
- * E. x martini Tiny Tim ('Waleutiny')
- & E. x martini 'Walberton's Red Flush'
- * E. mellifera AGM
- & E. myrsinites AGM
- E. nereidum AGM
- & E. nicaeensis
- & E. nicaeensis subsp. glareosa var. lasiocarpa
- E. oblongata
- * E. palustris AGM
- * E. palustris 'Walenburg's Glorie'
- 💠 E. x pasteurii (E. stygiana x E. mellifera)
- E. x pasteurii 'Honey Pot' (AGM subject to availability)
- E. x pasteurii 'John Phillips'
- & E. x pasteurii 'Phrampton Phatty'
- & E. pithyusa
- E. Redwing ('Charam')
- E. rigida AGM
- & E. 'Roundway Titan'
- * E. sarawschanica
- & E. schillingii
- * E. seguieriana
- ❖ E. seguieriana subsp. niciciana
- * E. sikkimensis
- E. sikkimensis 'Crûg Contrast'
- 💠 E. stygiana
- ❖ E. stygiana subsp. santamariae
- & E. stygiana 'Torridge' AGM
- & E. valdevillosocarpa
- E. wallichii ambig.
- & E. 'Whistleberry Garnet'





subsp. *glareosa* var. *lasiocarpa*

Suppliers to the RHS Plant Trial of hardy *Euphorbia* 2013–2015

Mr J Armitage, c/o Trials Office, RHS Garden Wisley, Woking, Surrey GU23 6QB

Avondale Nursery, 3 Avondale Road, Coventry, West Midlands CV5 6DZ

Beeches Nursery, Village Centre, Ashdon, Saffron Walden, Essex CB10 2HB

The Beth Chatto Garden, Elmstead Market, Colchester, Essex CO7 7DB

Bodiam Nursery, Bodiam, Robertsbridge, East Sussex TN32 5RA Bridgemere Nurseries,

Nantwich, Cheshire CW5 7QB Brockhill Nursery,

Brockhill Nursery, Sway Road, Tiptoe, Lymington, Hampshire SO41 6FR

Cotswold Garden Flowers,

Sands Lane, Badsey, Worcestershire WR11 7EZ

Crûg Farm Plants, Griffith's Crossing, Caernarfon, Gwynedd LL55 1TU

Dove Cottage Nursery, Shibden Hall Road, Halifax, West Yorkshire HX3 9XA

Elworthy Cottage Plants, Elworthy Cottage, Elworthy, Taunton, Somerset TA4 3PX

Mr J Fielding, 27 East Sheen Avenue, London SW14 8AR

Galloway Plants, Claymoddie, Whithorn, Newton Stewart, Dumfries and Galloway DG8 8LX

Great Dixter Nurseries, Dixter Road, Northiam, Rye, East Sussex TN31 6PH

Hardys Cottage Garden Plants, Priory Lane Nursery, Freefolk Priors, Whitchurch, Hampshire RG28 7NJ Hillier Nurseries, Ampfield House, Ampfield, Romsey, Hampshire SO51 9PA

Hoo House Nursery, Hoo House, Gloucester Road, Tewkesbury, Glos GL20 7DA

Kevin Hughes Plants, c/o Trials Office, as above

Longstone Hardy Plant Nursery, Station Road, Great Longstone, Bakewell, Derbyshire DE45 1TS

Madrona Nursery,

Pluckley Road, Bethersden,

Kent TN26 3DD

National Plant Collection of *Euphorbia* (hardy), 26 Casson Drive, Harthill, Sheffield S26 7WA

Phoenix Perennial Plants, Paice Lane, Medstead, Alton, Hants GU34 5PR

Plantipp BV, c/o Trials Office, as above

Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB RHS Garden Wisley, Woking,

Surrey GU23 6QB

Rijnbeek & Son Perennials, c/o Trials Office, as above

Sampford Shrubs,

Sampford Peverell, Tiverton,

Devon EX16 7EN

Special Plants,

Greenways Lane, Cold Ashton, Wiltshire SN14 8LA

Spring Reach Nursery, Longreach, Ockham, Surrey GU23 6PG

University of Oxford Botanic Garden, Rose Lane,

Oxford OX1 4AZ

Walberton Nursery, Yapton Lane, Arundel, West Sussex BN18 OAS

World's End Garden Nursery, Moseley Road, Hallow, Worcester WR2 6NJ

For more information

Details of current and past RHS Plant Trials, including Trial Reports, can be found online at rhs.org.uk/trials-awards

There are also a limited number of earlier Plant Trial Bulletins available to download, or as printed copies. Printed copies can be obtained from The Wisley Plant Centre at RHS Garden Wisley, or by contacting the Trials Office at the address below (donations are requested to cover the cost of these bulletins).

Horticultural Trials and Relations RHS Garden Wisley Woking, Surrey GU23 6QB Email: trials@rhs.org.uk

In 2017 the following trials will be taking place at RHS Gardens and Partner Gardens:

Agapanthus Nerine
Calibrachoa Parsnips
Cherry tomatoes Paeonia
Chrysanthemum Physocarpus

in containers Pinks and carnations

ColchicumRosemaryColoured lettuceRunner beansCornusSalad onions

Cypripedium Sarracenia – outdoors

Echinacea Shelling peas

Eucomis Strawberries (planted 2016)

Erica – winter-flowering Symphyotrichum
Gentiana novae-angliae
Hibiscus syriacus Viburnum
Hydrangea macrophylla Zantedeschia
Hypericum Zinnia

This *Grower Guide* was compiled with information from the RHS Plant Trial *Euphorbia Final Trials Report 2013–2015*, written by RHS Trials Officer Sue Drew. For more information about RHS Plant Trials visit **rhs.org.uk/trials-awards**



Sharing the best in Gardening

About the RHS

The Royal Horticultural Society was founded in 1804 by Sir Joseph Banks and John Wedgwood to inspire passion and excellence in the science, art and practice of horticulture. Our vision is to enrich everyone's life through plants, and make the UK a greener, healthier, happier and more beautiful place.

This is the first of a new series of *Grower Guides* from the RHS. It contains a wealth of information about *Euphorbia*, as well as highlighting the important role of Plant Trials in the work of the RHS to better inform and give confidence to gardeners about the plants they purchase.

For more information about the RHS, visit **rhs.org.uk**

The list of Euphorbia with an RHS Award of Garden Merit (AGM) listed within this guide are correct as of January 2017. Awards of Garden Merit are reviewed according to a rolling programme to ensure the standard of gardenworthiness is maintained.